

[Name of Document] ABSTRACT

[Abstract]

[Object] To provide a semiconductor device which can carry out a reflow process in an oxidizing atmosphere of a BPSG film 7 and prevents a reduction in the reliability of a gate oxide film 2 by hydrogen atoms.

[Solving Means] A nitrogen-containing oxide film 6 is formed on a silicon substrate 1 by using a N_2O gas or NO gas. Next, the BPSG film 7 is formed on the film 6 to carry out a heat treatment in the oxidizing atmosphere. From this, the film 6 is utilized as a film which does not contain the hydrogen atoms and does not transmit and diffuse oxygen atoms.

[Selected Figure] Fig. 1